ORGANOPHOTORECEPTOR WITH CHARGE TRANSPORT MATERIAL HAVING THREE ARYLAMINO GROUPS

Abstract of the Disclosure

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Improved organophotoreceptor comprises an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising:

(a) a charge transport material having the formula

$$Y_1$$
— $C=N-N-X_1-Y_2-X_2-N-N=C-Y_3$

where R_1 , R_2 , R_3 , and R_4 are, independently, H, an alkyl group, an alkaryl group, or an aryl group;

 X_1 and X_2 are, independently, a linking group having the formula -(CH₂)_m-, branched or linear, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, a NR₅ group, a CHR₆ group, or a CR₇R₈ group where R₄, R₅, R₆, and R₇ are, independently, H, hydroxyl group, thiol group, an alkyl group, an alkayl group, a heterocyclic group, or an aryl group; and

Y₁, Y₂, and Y₃ are, independently, an arylamine group; and

(b) a charge generating compound.

Corresponding electrophotographic apparatuses and imaging methods are described.